UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

34036

7590

10/21/2008

Silicon Valley Patent Group LLP 18805 Cox Avenue Suite 220 Saratoga, CA 95070 EXAMINER

ROSARIO, DENNIS

ART UNIT PAPER NUMBER

2624

DATE MAILED: 10/21/2008

	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
Ī	10/748,829	12/29/2003	Weidong Yang	NAN066 US	7169

TITLE OF INVENTION: LOCAL PROCESS VARIATION CORRECTION FOR OVERLAY MEASUREMENT

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$0	\$0	\$755	01/21/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where ar in m

indicated unless correc maintenance fee notific	correspondence including ted below or directed oth ations.	herwise in Block 1, by (a) specifying a new c	orres	pondence address;	and/o	r (b) indicating a sep	arate "	FEE ADDRESS" for	
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address) 34036 7590 10/21/2008					Note: A certificate of mailing can only be used for domestic mailing Fee(s) Transmittal. This certificate cannot be used for any other accompapers. Each additional paper, such as an assignment or formal drawin have its own certificate of mailing or transmission.					
34036 Silicon Valley 18805 Cox Ave Suite 220		Certificate of Mailing or Transmission I hereby certify that this Fee(s) Transmital is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.								
Saratoga, CA 9:	5070								(Depositor's name)	
									(Signature)	
									(Date)	
APPLICATION NO.	FILING DATE		FIRST NAMED INVEN	TOR		ATTC	RNEY DOCKET NO.	CO	NFIRMATION NO.	
10/748,829 TITLE OF INVENTION	12/29/2003 N: LOCAL PROCESS V	ARIATION CORRECTIO	Weidong Yang ON FOR OVERLAY N	MEA:	SUREMENT		NAN066 US		7169	
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE I	OUE	PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE		DATE DUE	
nonprovisional	YES	\$755	\$0		\$0		\$755		01/21/2009	
EXAM	MINER	ART UNIT	CLASS-SUBCLASS	S						
ROSARIO	O, DENNIS	2624	382-151000		_					
	(1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.									
recordation as set for (A) NAME OF ASS	nless an assignee is ident th in 37 CFR 3.11. Comp IGNEE griate assignee category of	pletion of this form is NC	T a substitute for filing (B) RESIDENCE: (C	g an a	assignment. and STATE OR C	COUNT	TRY)			
4a. The following fee(s) Issue Fee Publication Fee (4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) A check is enclosed. Payment by credit card. Form PTO-2038 is attached. The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).									
NOTE: The Issue Fee at	atus (from status indicate ns SMALL ENTITY statu nd Publication Fee (if req records of the United Sta	us. See 37 CFR 1.27.	ed from anyone other t		-		TITY status. See 37 C attorney or agent; or t			
Authorized Signature	2				Date					
Typed or printed name										
an application Confider	mation is required by 37 C ntiality is governed by 35 ed application form to the tions for reducing this bu Virginia 22313-1450. DO 313-1450.	TLS C 122 and 37 CFR	1.14 This collection i	is est	imated to take 12 i	minute	s to complete includi	no oath	nering preparing and	

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspio.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.			
10/748,829	12/29/2003	Weidong Yang	NAN066 US	7169			
34036 759	34036 7590 10/21/2008		EXAMINER				
Silicon Valley Par	tent Group LLP	ROSARIO, DENNIS					
18805 Cox Avenue			ART UNIT	PAPER NUMBER			
Suite 220 Saratoga, CA 95070			2624 DATE MAILED: 10/21/200	0			

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 830 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 830 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)	
	Application No.	Applicant(s)	
Notice of Allowability	10/748,829	YANG ET AL.	
Notice of Allowability	Examiner	Art Unit	
	Dennis Rosario	2624	
The MAILING DATE of this communication apperature All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT R of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in) or other appropriate commu IGHTS. This application is so	this application. If not included nication will be mailed in due course. THIS	ve
1. This communication is responsive to 7/8/08.			
2. The allowed claim(s) is/are <u>23-39</u> .			
 3. ☐ Acknowledgment is made of a claim for foreign priority u a) ☐ All b) ☐ Some* c) ☐ None of the: 1. ☐ Certified copies of the priority documents have 2. ☐ Certified copies of the priority documents have 	e been received. e been received in Application	ı No	
Copies of the certified copies of the priority do	cuments have been received	in this national stage application from the	
International Bureau (PCT Rule 17.2(a)).			
* Certified copies not received:			
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		a reply complying with the requirements	
4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which giv			
5. CORRECTED DRAWINGS (as "replacement sheets") must	st be submitted.		
(a) ☐ including changes required by the Notice of Draftspers	son's Patent Drawing Review	(PTO-948) attached	
1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date			
(b) ☐ including changes required by the attached Examiner' Paper No./Mail Date	s Amendment / Comment or	in the Office action of	
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in the			
6. DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT			
Attachment(s)			
1. Notice of References Cited (PTO-892)		ormal Patent Application	
2. Notice of Draftperson's Patent Drawing Review (PTO-948)		mmary (PTO-413), ⁄lail Date	
3. Information Disclosure Statements (PTO/SB/08),	7. 🔲 Examiner's /	Amendment/Comment	
Paper No./Mail Date <u>3/19/04 6/14/04 10/24/07</u> 4. ☐ Examiner's Comment Regarding Requirement for Deposit	8. ⊠ Examiner's S	Statement of Reasons for Allowance	
of Biological Material	9.		
	0. [] Other	•	_



Application No.

Application/Control Number: 10/748,829 Page 2

Art Unit: 2624

DETAILED ACTION

Response to Amendment

1. The amendment was received on 7/8/08. Claims 23-39 are pending.

Response to Arguments

2. Applicant's arguments, see remarks, page 8, last paragraph, filed 7/8/08, with respect to 102(e) have been fully considered and are persuasive. The rejection of claims 23-39 has been withdrawn.

Allowable Subject Matter

- 3. Claims 23-39 are allowed.
- 4. The following is a statement of reasons for the indication of allowable subject matter:

Claims 23 and 33 are allowable, because as applicants have properly pointed out on page 8 that "none of the references alone or in combination disclose the claimed features." Given that this statement is broad, more specifically the references do not teach the claimed "local process variation" since as applicants has properly pointed out on page 6 of the remarks, filed 10/24/07 that states, "As is also well known in the art... 'local process variations' are...a localized variation." Thus, the "local process variation" is a term of art that is missing in the cited references as applicants has properly pointed out on page 9 of the remarks, filed 3/24/08, that states, "Nikoonahad is <u>not</u> referring to local process variations" on page 9 of the remarks, filed 3/24/08, that states, "Raymond does not teach...local process variations" and page 11 of the remarks,

filed 3/24/08, that states, "Stirton does not teach...local process variations" and page 11 of the remarks, filed 3/24/08, that states, "Mieher is **not** discussing local process variations"

Page 3

Thus, respective dependent claims are allowable, too.

The closest prior art is Chapman (US Patent 6,517,669) that teaches "As will be appreciated by those skilled in the art, local process variations in the semiconductor manufacturing process are common and can be accounted for" in col. 6, lines 9-13. However, Chapman does not disclose or render obvious the majority of claims 23 and 33.

Another prior art, Matsumoto et al. (US Patent 7,229,566) is pertinent as teaching a variation within a grating as represented in fig. 7 where the variation was due to a defect of the grating which broadly corresponds to the claimed local process variation. However, given that Matsumoto is silent regarding the claimed local process variation, which is a term of art, Matsumoto does not render applicant's claims as anticipated or obvious.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis Rosario whose telephone number is (571) 272-7397. The examiner can normally be reached on 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella can be reached on (571) 272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/748,829 Page 4

Art Unit: 2624

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dennis Rosario/ Examiner, Art Unit 2624 /Matthew C Bella/ Supervisory Patent Examiner, Art Unit 2624